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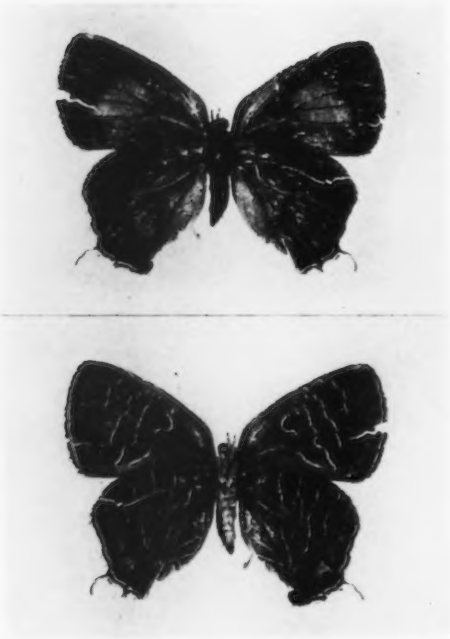

THECLA LIPAROPS—Forbes.

Thecla liparops liparops Leconte ♀. × 1½.
Honey Island, Okefinoke Swamp, Georgia.
June 1, 1912.

ENTOMOLOGICAL NEWS

VOL. LIV MAY, 1943 No. 5

What is Thecla liparops? (Lepidoptera: Lycaenidae).

By WM. T. M. FORBES, Department of Entomology, Cornell University, Ithaca, N. Y.

This name was proposed in 1833, in Boisduval and Leconte's "Histoire Générale et Iconographie des Lépidopteres et des Chenilles de l'Amérique Septentrionale." From the beginning it has been rather a mystery, for Boisduval, while publishing Leconte's description, apparently based on two or more specimens received from Abbot, and illustrating it by a figure copied from an Abbot plate, evidently had no personal knowledge of the butterfly itself, and suspected it was merely *favonius* Smith and Abbot;—while the latter name was misapplied by Leconte to *melinus*. Later references, so far as I know have been based wholly on the original publication, until Scudder in the "Butterflies of eastern North America" identified it as *Thecla strigosa* Harris; and that identification has stood until this year. Just recently Michener and dos Passos[1] have revived Boisduval's idea that it was probably a bad figure of *favonius* S. & A.

In evaluating Scudder's action we must remember that in that period races of butterflies were not generally considered worthy of a name, and his synonymizing of *strigosa* to *liparops* would by no means exclude a racial difference. Workers who have grown up with the recent code which subordinates other varietal to racial names should keep this fact in mind.

Let us then consider the differences between *favonius* and the species of which *strigosa* is the northeastern race, and compare with the differences given between Abbot's figures of

[1] Am. Mus. Nov., no. 1210, p. 2, Nov. 1942.

favonius (in S. & A.) and of *liparops* (in Bdv.-Lec.). The figures show the following differences which should be significant:

Thecla favonius: 1, upper side with double, sharply defined tawny patch on fore wing and 2, a similar and equally large patch on hind wing, 3, anal lobe tawny (shown on female but not male figure); 4, under side with a single even post-medial line, defined with black on each wing, 5, hind wing with tawny area continuous and extending far toward costa.

Thecla liparops: 1, upper side of fore wing with a single, simple oval tawny patch and 2, the tawny on hind wing much less extensive and submarginal only, 3, anal lobe black (mentioned in description, but incorrectly shown in figure of upper side, which has no anal lobe); 4, under side with four, wavy (according to description) white lines, not accompanied by black, and 5, hind wing with separate tawny patches on inner half and small separate spots on costal half.

If we examine specimens of *favonius* and *strigosa* we find exactly these differences, except that the tawny of *favonius* may be limited to the hind wing, and on *strigosa* is absent or represented by a few scattered scales on disc of fore wing and near margin of hind wing. But to confirm the original figure, the only specimen that I know of from lowland Georgia, a female in the Cornell Univ. collection from Honey Island, Okefinoke Swamp, collected by Bradley, has the large tawny patch on the fore wing, just as given in the original description and figure. The tawny on hind wing is reduced to a few scales, but this variation takes it even further from *favonius* in the proper direction (see figure). It also shows faintly the submarginal series of tawny spots on under side of fore wing so conspicuous in the Boisduval-Leconte figure. *Favonius* also may have tawny at this point, but it takes the form of a fine interrupted line, rather than a series of spots.

Our specimen is substantially larger than the original figure, which is, I believe, of a male. While the sex-spot, mentioned in Leconte's description, is not shown clearly in the figure, the latter belongs to the series that were tampered with by Bois-

duval (see his preface) and the great black sweep in front of the tawny patch (which is foreign to any *Thecla* pattern) may have covered its traces. The wing form, which I suppose Boisduval would not have dared to alter, also points to a male. I have no notes on other specimens, nor of any other "strigosa" form from the Gulf Strip, but have a dim memory of having seen another specimen or two.

My conclusion is that the current listing is correct, as in McDunnough's List under no. 389: *liparops liparops* from Georgia and *l. strigosa* from the North.

Another lost species in the same work, which has been universally misidentified, is *Melitaea ismeria.* This name is currently given to the common and wide spread but more western *M. carlota* Edw., but the original figure shows a quite different butterfly, with a much more normal *Melitaea* pattern above and no traces of the complex marginal markings so distinctive of *carlota.* A more important character would appear to be the presence of three separate brown bands on basal half of hind wing below, which separates it from all Melitaeas known to me, though they can be traced, partly fused, in *carlota,* and also in the exceedingly rare true *gorgone.* The latter is of course found along the southern Atlantic coast, and was doubtless based also on an Abbot specimen. *Carlota* may perhaps be a race of it, though it also lacks the distinctive marginal pattern. It exists in the National Museum and perhaps elsewhere, but has not been figured or even recorded as distinct from "ismeria" (i.e. *carlota*) since the original description.

Dr. Joseph L. Williams.

Dr. Joseph L. Williams, member of the American Entomological Society and associate professor at Lincoln University, has been elected a Fellow of the Royal Entomological Society of London—Science.

A New Dorilaidae [1] (Diptera).

WILLIAM F. RAPP, JR., Chatham, New Jersey

Dorilas hertzogi [2] n. sp.

Differs from *Dorilas varius* (Cresson) as described by Mr. E. T. Cresson, Jr.,[3] in having the antennae with the third joint black; and no white spots on the first segment of the abdomen. The halteres are brownish-yellow and the abdomen is a polished, uniformly black, with the exception of the first segment which is silvery.

Type.—Male; Glassboro, Gloucester County, NEW JERSEY, June 21, 1942 (Collection of W. F. Rapp, Jr.). One male was taken while sweeping around in a small cat-tail (*Typha* sp.) marsh about a mile east of Glassboro on the Fish Pond Road.

In running the specimen over the table prepared by Mr. Cresson in the reference quoted above, it readily traces as far as *D. varius*. In the description of *varius* there are many characters in common with *hertzogi*. But the differences pointed out in the comparative description are decidedly too marked to pass under the same species.

The following key, based on Mr. Cresson's key to couplet 9, may be used to determine the species:

9. Haltares white or brownish yellow

Abdomen shining with bases of segments opaque; tibiae and tarsi yellow ..... *mainensis* Cresson

Abdomen polished, with only apex of first segment silvery laterally.

Third joint of antennae yellow, 2 white spots on first segment of abdomen ..... *varius* Cresson

Third joint of antennae black, no white spots on first segment of abdomen ..... *hertzogi* n. sp.

[1] Pipunculidae of authors [Ed.].

[2] It gives me great pleasure to dedicate this species to Mr. P. H. Hertzog of The Peddie School, Hightstown, New Jersey, who has given me much encouragement in the study of entomology.

[3] Trans. Am. Ent. Soc., XXXVI, p. 309.

Hyaliodinae, New Subfamily of Miridae (Hemiptera).

By HARRY H. KNIGHT, Iowa State College, Ames, Iowa.

The genus *Hyaliodes* Reuter (1876) represents a very distinctive type which has heretofore reposed in the Macrolopharia of Reuter (1910), and Dicyphinae in the Catalogue of Hemiptera by Van Duzee (1917). When the writer (1918) first published a subfamily key to Miridae it was not found practical to key out *Hyaliodes* in the same couplet with the Dicyphinae. The same was true as published in the "Hemiptera of Connecticut" (1923) and again, more recently, in "The Plant Bugs, or Miridae, of Illinois (1941). All along I have felt that *Hyaliodes* should stand as the type of a new subfamily but have delayed action until more study could be made of related genera of the Neotropical region.

Subfamily Hyaliodinae may be keyed out as was done with the type genus, *Hyaliodes* Reuter, in the keys referred to above. Distinctive characters for the group may be stated as follows: claws sharply bent near base, a prominent tooth on inner angle of base; arolia bristle-like, pseudarolia absent (see fig. 23, Knight, 1941). Hemelytra strongly translucent, embolium expanded, usually with thin sharp edge. Head projecting horizontally but with anterior portion before eyes sharply vertical in position. Subfamily Hyaliodinae is thus far recognized only from the Neotropical and Nearctic regions and includes the genera here listed. *Hyaliodes* Reuter (1876); five genera described by Distant (1884), namely *Annona, Antias, Neocarnus, Paracarnus,* and *Trygo;* also *Auchus* Distant (1893).

Among material collected in Ecuador by Dr. S. W. Frost, I find an apparently undescribed genus which is referable to the Hyaliodinae.

Hyaliodocoris new genus.

Allied to *Annona* Distant and *Hyaliodes* Reuter, but distinguished by the greatly narrowed anterior portion of prothorax, the much narrowed and confluent calli, and by the sharply con-

stricted collum immediately behind the eyes; basal carina fine yet distinct, collar flat, set off by a sharp, punctate stricture. Eyes large, set close to the base of head, posterior margins nearly transverse and in line with basal carina; vertex sloping forward, the frons sloping abruptly to base of tylus. First antennal segment in length not equal to width of head across eyes, length of segment II more than twice the length of segment I. Scutellum smooth, distinctly convex but not conical. Hemelytra translucent, embolium moderately expanded, reflexed sharply upward at an angle of forty-five degrees, embolar margins nearly parallel in position. Arolia bristle-like, pseudarolia absent, claws toothed at base and sharply angled, nearly as in *Hyaliodes*. Genital segment more like *Hyaliodes* than *Annona*, the anal tube projecting well to the rear, not unlike the exhaust pipe of the modern automobile. *Genotype: Hyaliodocoris frosti* n. sp.

Hyaliodes frosti n. sp.

Hemelytra translucent, clavus black but with a clear spot each side by apex of scutellum; a transverse mark across tip of clavus, one bordering base of cuneus, and cubital vein, black.

♂. Length 4.7 mm., width 1.6 mm. Head: width, .75 mm., vertex .30 mm.; basal carina fine yet distinct, eyes prominent, set close to base of head, posterior margins nearly transverse and in line with basal carina, collum moderately exposed; frons sloping sharply to base of tylus; dark brown to black, polished. Rostrum, length 1.43 mm., reaching to middle of hind coxae, yellowish. Antennae: segment I, length .60 mm., slender, brownish black; II, 1.47 mm., cylindrical, slightly more slender than I, black, clothed with prominent pale hairs; III, 1.08 mm., slender, black; IV, .40 mm., slender, black.

Pronotum: length .86 mm., width at base 1.21 mm., narrowed apically, anterior angles scarcely distinct; collar flat, width .43 mm., set off by a distinct punctate stricture. Disk strongly convex, impressed near basal angles, coarsely and rather closely punctate; calli narrowed, transversely confluent, convex, polished, delimited behind by punctures; lateral margins scarcely

distinct, rounded over to the punctate propleura; brownish black, collar and median area of disk yellowish, basal margin pallid. Scutellum strongly convex, impunctate, black, shining.

Hemelytra translucent, minutely punctate, sparsely clothed with suberect, pallid pubescence, hairs longer on clavus; clavus black, a clear spot each side by tip of scutellum; clear translucent, a transverse mark across tip of clavus and extending to middle of corium, anal ridge and basal area of membrane, a mark at tip of corium bordering cuneal fracture, and cubital vein in membrane, dark fuscous to black; cuneus and membrane clear. Legs pale to yellowish, apical half of femora more dusky brown. Sternum, pleura and venter brownish black, ostiolar peritreme pallid.

Holotype: ♂ November 20, 1937, Baños, ECUADOR (S. W. Frost); author's collection. *Paratypes:* ♂ Nov. 17, 3 ♂ Nov. 19, 1937, Baños, Ecuador (S. W. Frost). Named in honor of the collector, Dr. S. W. Frost, who kindly presented the author with this and a few other species of Miridae.

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Three New Western Aphids [1]

By GEORGE F. KNOWLTON, Utah State College, Logan, Utah.

The following report includes descriptions of three apparently undescribed aphids, collected in Utah and Washington, with notes on a few additional species.

Kakimia utahensis n. sp.

Alate vivipara: Body 1.44 mm. long and .68 wide across the abdomen; antennae dusky beyond base of III; antennal III, .43 to .44 mm. long with 32 tuberculate sensoria; IV, .32 to .33 mm. with 10 to 12 sensoria; V, .3 mm. with 4 secondary sensoria; base of VI .114, unguis (?) broken; rostral IV + V dusky, .13 mm. long; legs pale to dusky, distal ends of tibiae and all of tarsi darker; hind tibiae 1.12 to 1.2; hind tarsi .085; cornicles pale to dusky, lightly imbricated to wrinkled, .35 mm.; cauda pale to dusky with 2 to 3 pairs of lateral hairs; abdomen with darker areas on sides, these being most conspicuous on segments I, II and III.

Apterous vivipara: Size 1.34 to 1.36 mm. long and .64 to .72 wide across abdomen; body generally pale; width through eyes .35; antennae pale to dusky, darker on distal ends of IV, V and all of VI; antennal III, .41 to .46 mm. long with 7 to 11 sensoria; IV, .27 to .3; V, .25 to .27; VI, .09 to .112 plus .35 to .37 mm.; rostral IV + V dusky, slenderly obtuse at tip, .13 to .16 mm.; legs pale, distal ends of tibiae dusky but paler than in alates; hind tibiae 1.2 to 1.29; hind tarsi dusky, .09 to .1; cornicles pale to slightly dusky, .25 to .33 mm.; cauda pale to dusky, .2 to .21 mm. with 3 to 2 pairs of lateral hairs; abdominal sclerites of cleared specimens without deeply pigmented large dorsal areas.

Collected on columbine, *Aquilegia rubicunda*, Vernon Canyon, UTAH, June 19, 1940 (G. F. Knowlton). Type in the collection of the writer.

Taxonomy: Kakimia utahensis n. sp. keys to *K. houghtonensis* (Troop) in Gillette and Palmer's key [2] from which it differs

[1] Contribution from the Department of Entomology, Utah Agricultural Experiment Station, Logan.

[2] Ann. Ent. Soc. Amer., 27: 160, 1934.

in having longer cornicles and hind tibiae, more sensoria on antennae of alate and fewer on aptera. It resembles *K. essigi* (G.–P.) from which it differs in having paler antennae, legs and cornicles, shorter antennals III and unguis. *K. utahensis* differs from *K. castelleiae* Sampson in having dark lateral spots on sides of abdomen of alate, shorter antennal III and longer cornicles.

Myzus harmstoni n. sp.

Alate vivipara: Body and appendages of cleared specimens largely brownish to dusky, with a large dorsal pigmented area on abdomen, caudad to the dusky bands which cross segments I and II; abdomen also possesses dusky lateral areas; body 2.34 to 2.45 mm. long; width through eyes .49; antennae blackish except paler base of III; antennal III, .6 to .63 mm. long, with 8 to 11 rounded sensoria in a row over most of the length of this segment; IV, .48 to .52, without sensoria; V, .4 to .43; VI, .145 to .16 plus .73 to .75 mm.; rostral IV plus V dusky, .12 mm. Hind femora dusky, paler at base; hind tibiae dusky, 1.52; hind tarsi .11. Cornicles dark, .56 to .6 mm. long, distal .13 mm. reticulated; cauda dusky, .26 mm. long, with two pairs of lateral hairs; anal plate broad, blackish, slightly pointed.

Collection: Specimens were collected on snowberry, *Symphoricarpos,* Naches Pass, WASHINGTON, June 18, 1939 (G. F. Knowlton). Type in the collection of the writer.

Taxonomy: The *M. harmstoni* n. sp. specimens key to *Myzus cerasi* (Fab.) in Mason's [3] key, from which it differs in having: Fewer sensoria on antennals III and these confined to a row, distinctly longer antennal segments, greater width across the head, longer cornicles having distinct reticulations. It resembles *M. lythri* (Schr.) in having the pigmented dorsal abdominal patch, but *harmstoni* differs in possessing longer antennal segments, cornicles and fewer antennal sensoria on III.

Myzus lythri (Schr.). On *Prunus mahaleb* at Springville, Utah, June 1942 (Knowlton); Declo, Idaho (D. E. Fox).

M. monardae (Davis). Murtaugh, Idaho, October 1930 (Fox).

[3] U.S.D.A. Misc. Pub. 371, p. 4, 1940.

M. porosus Sand. (= *Macrosiphum zoorosarum* K.–S.). On rose at Naches Pass, Washington, July 18, 1939; Santaquin, Utah, June 1941 (Knowlton).

Phorodon menthae (Buckton). In Utah on *Mentha spicata* at Hooper, July 24, 1942, with *Orus tristicolor* Wh. feeding on one of the specimens; Hurricane, Logan, Ogden, Providence, St. George and Santa Clara; on *Mentha penardi* at Mt. Timpanogos, July 26, 1942; also Logandale, Nevada, May 13, 1935 (Knowlton).

Macrosiphum puyallupsi n. sp.

Alate vivipara: Body 3.12 mm. long and 1.32 wide across the abdomen; antennae 4.7 (+) mm. long, dusky; antennal III, 1.12 to 1.14 mm. long, with 82 to 88 scattered sensoria; IV, .93, without sensoria; V, .74 to .76 with 21 to 23 sensoria in a row on distal three-fourths of segment; VI, .19 plus unguis 1.43 + (tip broken off); rostrum reaching second coxae; rostral IV + V slenderly obtuse, .16 long: wing veins dusky; hind tibiae 2.7; hind tarsi .205; cornicles dusky, .6 to .64 mm. long with 6 to 8 rows of reticulations on distal .08; cauda dusky, .31 mm. long with 7 to 9 lateral and dorso-lateral hairs on each side; abdomen with dusky blotches forming broken patterns across the abdominal segments.

Taxonomy: Macrosiphum puyallupsi n. sp. runs to *Macrosiphum tenuitarsis* G.–P., in the Gillette and Palmer key,[4] from which it differs in having more sensoria on antennals III, numerous sensoria on antennal V, larger size with longer antennal segments, shorter cornicles and less pointed and shorter cauda. From *M. albifrons* Essig it differs in possessing sensoria on antennal V and shorter cornicles.

Collections: Taken upon bush lupine at Puyallup, WASHINGTON, June 24, 1939, by Herald C. Bennion. Type in the collection of the writer.

[4] Ann. Ent. Soc. Amer., 27: 170, 1934.

Current Entomological Literature

COMPILED BY THE EDITORIAL STAFF.

Under the above head it is intended to note papers received at the Academy of Natural Sciences of Philadelphia and the University of Pennsylvania, pertaining to the Entomology of the Americas (North and South), including Arachnida and Myriopoda. Articles irrelevant to American entomology will not be noted; but contributions to anatomy, physiology and embryology of insects, however, whether relating to American or exotic species will be recorded.

This list gives references of the current or preceding year unless otherwise noted. Continued papers, with few exceptions, are recorded only at their first installment.

For records of Economic Literature, see the Experiment Station Record, Office of Experiment Stations, Washington. Also Review of Applied Entomology, Series A, London. For records of papers on Medical Entomology, see Review of Applied Entomology, Series C.

NOTE: The figures within brackets [ ] refer to the journal in which the paper appeared, as numbered in the List of Journals given at the end of the literature. The number of the volume, and in some cases, the part, heft, &c. is followed by a colon (:). References to papers containing new forms or names not so stated in titles are followed by (*); if containing keyt are followed by (k); papers pertaining exclusively to Neotropical species, and not so indicated in the title, have the symbol (S).

Papers published in ENTOMOLOGICAL NEWS are not listed.

GENERAL—ALLAN, P. B. M.—Substitute foodplants. [21] 55: 1–3. BRAGDON, K. E.—Lets get closer to the farmer. [39] 25: 49–52. CABLE, R. M.—A handy enclosed mount for pinned insects. [Turtox News] 21: 49–50, ill. CURRAN & LUTZ.—Insects, ticks and human disease. [Amer. Mus. N. H., Guide leaf.] 113: 38 pp., ill. DAVIDSON & WILDING.—A quantitative faunal investigation of a cold spring community. [119] 29: 200–9, ill. EATON, T. H.—Six-legged army. [Fauna, Phila.] 5: 22–25, ill. FLETCHER, T. B.—Osmaterium or Osmeterium. [9] 75: 19. FORD, H. D.—Lepidoptera and human perspiration. [9] 75: 260. MOFFETT, J. W.—A limnological investigation of the dynamics of a sandy, wave-swept shoal in Douglas Lake, Mich. [Trans. Amer. Microscop. Soc.] 62: 1–23. MUNRO, J. W.—Place of research in the control of injurious insects. [31] 151: 157–60. AN OLD BOOKMAKER.—"An artist's note." [Note on color printing processes]. [21] 55: 3–4. PARKER, G. H.—Coloration of animals and their ability to change their tints. [54] 1943: 197–210, ill. PENNAK, R. W.—Limnological variables in a Colorado mountain stream. [119] 186–99, ill. RAMALHO, G. R.—Sobre um novo capturador para a coleta de pequenos insectos. [126] 7: 109–111, ill. ROUDABUSH, R. L.—How to make whole mounts of small insects. [118] 16: 73. TEALE, E. W.—Pinhead portraits [of insects]. [Frontiers, Phila.] 7: 98–99, ill.

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A. concolor in relation to small quantities of salts in solution and to the temperature of the water. [Proc. Linn. Soc. N. S. Wales] 66: 287–92; 396–400.

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3.—United States Dept. Agriculture. 8.—Entom. Monthly Magazine. 9.—The Entomologist. 21.—Entom. Record & Jour. of Variation. 31.—Nature, London. 39.—Florida Entomologist. 50.—Proc. U. S. National Museum. 54.—Scientific Monthly. 58.—Revista, Acad. Colombia, Bogota. 61.—Proc., Calif. Acad. Sciences. 91.—Jour., Washington Acad. Sciences. 92.—Biological Bulletin. 103.—Jour., Kansas Ent. Society. 108.—Proc., R. Entom. Soc., London, (B). 118.—Ward's Nat. Sci. Bulletin. 119.—American Midland Naturalist.

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HOUSEHOLD PESTS IN CHICAGOLAND; How to Get Rid of Them. By Dr. Hugo Hartnack. Published by the Author, Chicago. 1942.—In Entomological News for November, 1939, there was published a review of Dr. Hartnack's "202 Common Household Pests of North America." The same author has lately published the ninth edition of his booklet on the household pests of Chicagoland; a bound pocket size booklet of 48 pages,

profusely illustrated. It gives short accounts of the habits, characteristics and control of rats, mice, roaches, silverfish, bedbugs, fleas, ants, termites, moths and several other less important pests. It should find a useful place in the households not only of Chicago, but of the northeastern portion of the United States. Although giving some methods for the control of the pests, it recommends the Dr. Hartnack Exterminating Service, Inc., Chicago, if the infestation cannot be easily controlled.—E. T. Cresson, Jr.

Dr. Alexander B. Klots.

Dr. Alexander B. Klots, Biology Department, College of the City of New York and Entomology Department, American Museum of Natural History, has been commissioned as captain in the Sanitary Corps and is now stationed at Camp Joseph T. Robinson, Arkansas—Science.

Conference of the North Central Entomologists.

The twenty-second annual conference of the North Central Entomologists is scheduled to meet at Purdue University. The program will deal with war problems in entomology, insect problems of the Armed Forces, Priority Chemicals and Insecticide Substitutes, and Protection of Crops and Animals Essential to the War Effort—Science.

EXCHANGES

This column is intended only for wants and exchanges, not for advertisements of goods for sale or services rendered. Notices not exceeding three lines free to subscribers.

These notices are continued as long as our limited space will allow; the new ones are added at the end of the column, and, only when necessary those at the top (being longest in) are discontinued.

Wanted—Tropical Lepidoptera and Insects. Also domestic species. Will exchange or buy specimens. M. A. Zappalorti, 253 Senator Street, Brooklyn, N. Y.

Wanted—Specimens of the genus Calendra (Sphenophorus) from North America. Will exchange Eastern U. S. Calendra or other Coleoptera for desired species. R. C. Casselberry, 302 Lincoln Avenue, Lansdowne, Penna.

Coccinellidae wanted from all parts of the world, especially South and Central America. Buy or exchange. G. H. Dieke, 1101 Argonne Drive, Baltimore, Md.

Coleoptera—Will exchange mounted and labeled specimens from North America. All groups except Rhynchophora. G. P. Mackenzie, 1284 Sherwood Road, San Marino, Calif.

I shall be grateful to anyone who will give me any reference where insects taken on Mt. Desert Island, Maine, have been used wholly or in part in describing a species.

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1105.—**Rehn & Rehn**—The N. Am. locust genus Paratylotropidia (Acrididae). (68: 33–60, 2 pls., 1943) ..... .65

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